

## DATA SOURCES FOR CONGENITAL ANOMALIES

The North Carolina Birth Defects Registry uses a multi-source case ascertainment system to identify infants with birth defects. The data systems currently used in the registry are birth and infant death certificates, hospital discharge records, Medicaid claims, Children's Special Health Services (CSHS) records and neonatal intensive care unit (NICU) reports.

Table 1 shows, for each data source, the number and percentage of all live births with reported congenital malformations. The increase in the number of Medicaid infants with birth defects probably reflects the increase in the percentage of all deliveries paid for by Medicaid during this period, which rose from 23.5 percent in 1988 to 35.6 percent in 1990.<sup>3</sup> The increase in 1989 in the number of hospital discharge records

indicating congenital anomalies may be due, in part, to more complete discharge data provided by the Medical Database Commission.

As more data sources are linked together, an increasing number of records are composed of information from more than one data set. With the addition of the NICU discharge and statewide hospital discharge data sources, records with multiple sources of data increased from 25.2 percent in 1988 to 36.8 percent in 1990 (Table 2). The percentage of cases uniquely ascertained from the birth certificate, infant death certificate, and Medicaid claims has declined since 1988. Since both the Medicaid and hospital discharge files are billing records, most of the Medicaid claims are duplicated in the hospital discharge file beginning in 1989. The total number of records with reported congenital anomalies in 1990 was 6,465, an 11 percent increase over 1989.

**Table 1**  
**Numbers and Percentages of All Congenital Anomalies (ICD-9 740-759)**  
**Reported by Source of Data**  
**North Carolina, 1988-90**

Source of Data	Number of Records with Reported Congenital Anomalies			Percent of All Births*		
	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>
Birth Certificates	1,043	1,001	1,113	1.1	1.0	1.0
Medicaid Claims	1,189	1,465	1,995	1.2	1.4	1.9
Infant Deaths	256	232	247	0.3	0.2	0.2
Hospital Discharge	2,488	4,092	4,745	2.6	4.0	4.5
CSHS	740	994	906	0.8	1.0	0.9
NICU	N/A	504	503	N/A	0.5	0.5

\*Total number of resident live births:

1988 = 97,560

1989 = 102,091

1990 = 104,439